

Boston's People and Economy

INTRODUCTION

Boston was first incorporated as a town in 1630 and then as a city in 1822, making it one of the oldest cities in the United States. The City has evolved into a center for innovation and entrepreneurship as well as for social and political change. Boston has become the economic engine and cultural hub of New England.

As the seat of Suffolk County, the capital city of Massachusetts, and the region's hub, Boston is home to approximately 693 thousand residents, many world-renowned institutions of higher education, some of the world's finest inpatient hospitals, numerous successful corporations, and many professional sports teams and cultural organizations. Tens of millions of people visit Boston each year to take in its historic sites, diverse neighborhoods, cultural or sporting events, and functions in one of Boston's convention centers.

The outbreak of COVID-19, a respiratory illness caused by a new strain of coronavirus, which began in early 2020, required restrictive public health interventions that created severe economic disruptions in Boston and across the world and continues to adversely affect global, national, state and local economic activity. The City is vigorously pursuing economic opportunities and investments, to ensure Boston will continue to be a global leader in the twenty-first century.

Boston, Massachusetts Quick Facts

Government

Founded	Sept. 17, 1630
State (capital)	Massachusetts
County (seat)	Suffolk
Government Type	Strong Mayor-Council
Mayoral Term (years)	4
Councilor Term (years)	2
District Councilors	9
At-Large Councilors	4
U.S. House Reps. (MA)	10
Electoral Votes (MA)	11

People

Population (2018)	692,600
% of State	10.0%
% Growth (from 2010)	12.1%
% Non-white/Hispanic	55.5%
% White/non-Hispanic	44.5%
Median age (years)	32.6

Geography

Neighborhoods	23
Land area (Sq. miles)	48.4
Water area (Sq. miles)	41.2
Density (Pop./Sq. mile)	14,155
Public road mileage	917.1
Ft. above sea-level	141.0

Boston Firsts

Public park (Bos. Common)	1634
Public school (Boston Latin)	1635
Public library	1653
Telephone	1875
Subway	1897
World Series	1903
Mutual Fund	1924
Community Health Center	1965

Table 1

BOSTON'S GROWING AND CHANGING POPULATION

The City of Boston ranks as the 21st largest city by population in the United States. According to the U.S. Census Bureau's American Community Survey (ACS) Boston's population in 2019 was 692,600. The average annual growth for Boston from 2010 through 2019 was 1.3%. Recent trends suggest Boston's population is growing at faster rates than in prior decades.

Boston is the center of the 11th largest Combined Statistical Area (CSA) in the nation. Metropolitan Boston had 4.9 million people and 3.7 million jobs in 2019.

Over the thirty years between 1950 and 1980 Boston's population declined 30% from 801,444 to 562,994. This decline is attributed to a post-war national trend of suburbanization. Since 1980, however, Boston's population has stabilized and grown. The 2010 U.S. Census records the city's population at 617,594, representing a nearly 5% increase over its 2000 population and a nearly 10% increase over 1980. The ACS estimates Boston population in 2019 at 692,600, 12% increase over 2010.

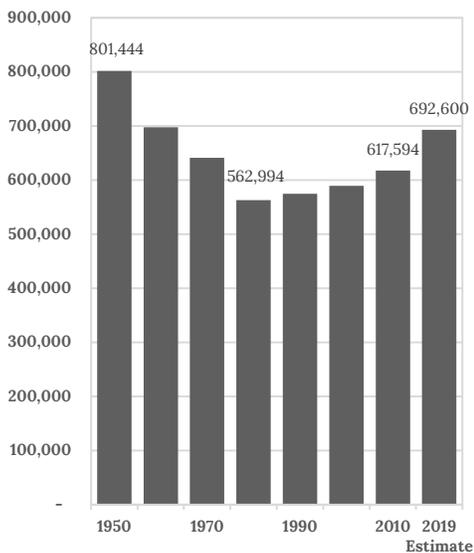


Figure 1 - Boston's Population
1950-2010 Census, 2019 ACS Estimate

With this growth in population has come a change in demographics. In 1950, the share of white people was 95%, while non-white residents accounted for 5% of the City's population. Boston became a majority-minority city in 2000. In 2019, Boston had 55.5% non-White residents.

The 2019 ACS data also shows that Boston is a relatively young city. The median age in Boston is 32.6, due to the large number of students and young professionals living and working in the City. More than one out of every three persons in Boston is between the ages of 18 and 34 years old (39%). People ages 35 to 54 years old comprise 23% of the population and people ages 55 to 64 years old comprise 10%. Senior citizens ages 65 and above make up 12% of the City's population. The fastest growing age group between 2000 and 2019 was the 65-69 age group, seeing a 68% increase, which is consistent with national trends and the aging of the baby boomer population.

Along with population growth, the number of households in Boston has also grown, now reaching 271,553. The share of these households that are married is 37%. Household size increased from 2.3 persons in 2010 to 2.4 persons in 2019.

BOSTON'S JOBS, LABOR FORCE, AND INCOME

Boston ranks among the highest in concentrations of employment in the U.S. Boston supplies an estimated 96% of jobs in Suffolk County and 17% of the state's jobs. In 2020, there were approximately 613 thousand payroll jobs in Boston.

Employed residents in Boston reached 406,937 in 2019. However, between mid-February and mid-April 2020, that number fell by 83,536, while unemployed residents increased by 43,157. The difference between these two numbers points to residents leaving the labor force, most likely after being permanently laid off and seeing little

hope of finding a new job in uncertain economic times.

Prior to the COVID-19 pandemic, the unemployment rate had been decreasing for both Massachusetts and Boston, with both dropping below 3% in 2019. However, the prolonged shutdown in Massachusetts due to the spread of the virus in the state caused the state unemployment rate to reach 16.4% in April 2020, or 558 thousand unemployed residents, the highest rate in the country. In May, the rate began dropping, reaching 7.1% in February 2021, or 267 thousand unemployed residents. Boston's unemployment rate reached 19.3% in June, falling to 7.6% in December.

Figure 2 shows the National, Massachusetts and Boston Metro Area Unemployment rates since 2000. During and following recessions, unemployment rates increase dramatically. Nationally, the highest annual rate occurred in 2010, averaging 9.6%, following the Great Recession. In Massachusetts and Boston, the current recession has caused for the highest annual average, with 9.0% and 9.3%, respectively.

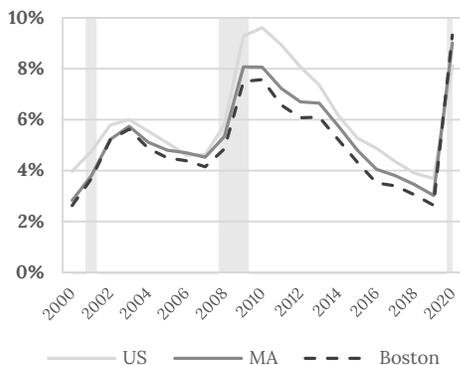


Figure 2 National, Massachusetts and Boston Metro Unemployment Rates, 2000-2020, Federal Reserve Economic Data

Higher education, health care, and financial services play a major role in Boston's economy. Since the Great Recession, Boston's job growth was positive across most industries but was mostly concentrated in health care and social assistance, professional and technical

services, and education. The health care and social assistance industry employs the largest number of people in Boston, 22.1% of total jobs. Educational services is an area of specialization for Boston (5.4% of total jobs), with an employment share three times the national average.

Boston hosts 35 universities, colleges, and community colleges, with a combined enrollment of approximately 150,000 students annually. Included among the city's colleges and universities are some of the finest educational institutions in the country, including Boston College, Boston University, Northeastern University and Harvard University.

These institutions of higher education have a major effect on the Boston's economy. Because many of these students remain in Boston after graduation, the city's educational institutions are a major source of highly-skilled professionals for Boston's workforce.

As the COVID-19 pandemic continues to surge throughout the country, and with many institutions continuing remote learning in the spring 2021 semester, enrollment figures are continuing to decline. Nationally, undergraduate enrollment was down 4.5%, while graduate enrollment increased by 4.3% compared to spring 2020. Overall, college enrollment stood at 2.9% lower than last spring's level.

In 2019, the Boston Planning and Development Agency (BPDA) approved 672,000 new square feet of institutional development across the city and in 2020 over 1.1 million square feet were approved. These new projects primarily came from major educational and medical institutions.

Many of the nation's finest research and teaching hospitals are located in Boston, including Massachusetts General Hospital, Brigham and Women's Hospital, Beth Israel Deaconess Hospital, Boston Medical Center, Tufts Medical Center, and Boston Children's Hospital, as well as 25

community-based health centers. In total, there are 21 inpatient hospitals in the city with a combined 6,095 beds as of 2019. Furthermore, Boston is home to the medical and dental schools of Harvard University, Tufts University, and Boston University.

The Boston metropolitan area remains the nation's foremost region for the life sciences industry. Boston's life science industry benefits from skilled labor force availability, leading universities in basic academic science fields, innovative research and development districts, proximity to major research hospitals, and strategic presence of venture capital resources. The realty group Jones Lang LaSalle ranks the Greater Boston area as the largest concentration of life science researchers (pharmaceuticals, biotechnology, and medical devices) in the U.S., home to 19 of the 20 largest biotechnology and pharmaceutical companies by market cap.

Many of the country's leading financial services firms are located in Boston, including Fidelity Investments, John Hancock/Manulife Financial, State Street Corporation, and Wellington Management.

Table 2 provides a summary of the number of payroll jobs by industry for the year 2020.

Boston's Total Payroll Job Estimates by Industry - 2020

Industry	2020	Percent
Health Care and Social Assistance	135,667	22.1%
Professional, Scientific, and Technical Services	93,080	15.2%
Government	68,283	11.1%
Finance and Insurance	67,601	11.0%
Accommodation and Food Services	37,816	6.2%
Educational Services	33,296	5.4%
Retail Trade	32,713	5.3%
Administrative and Waste Services	29,672	4.8%
Information	21,074	3.4%

Other Services, excluding Public Admin.	16,234	2.7%
Transportation and Warehousing	15,544	2.5%
Real Estate and Rental and Leasing	13,747	2.2%
Construction	13,600	2.2%
Wholesale Trade	8,876	1.4%
Management of Companies and Enterprises	8,664	1.4%
Arts, Entertainment, and Recreation	7,992	1.3%
Manufacturing	7,259	1.2%
Utilities	1,369	0.2%
Natural Resources and Mining	46	0.0%
Total Jobs	612,533	100%

Table 2

Source: Massachusetts Executive Office of Labor and Workforce Development (EOLWD), ES-202 and CES, BPDA Research Division Analysis.

The BPDA estimates that the total number of payroll jobs located in Boston fell from 670,886 in 2019 to 612,535 in 2020, or a loss of approximately 58,000 payroll jobs (8.7%). This decrease is much greater than the 15,000 average annual jobs lost in Boston between 2001 and 2004 or the 17,500 jobs lost in 2009.

Job losses were not felt evenly across industries. Industries that rely on physical proximity suffered significant job losses. Figure 3 illustrates the percentage of jobs lost in industries where more than 10% of jobs were lost. *Accommodation and Food Services* suffered the highest number of jobs lost as well as the highest percentage, dropping from 62,687 jobs in 2019 to 37,816 in 2020 – almost 25,000 jobs lost, or 40%. *Arts, Entertainment and Recreation* lost 3,343 jobs, or 29%.

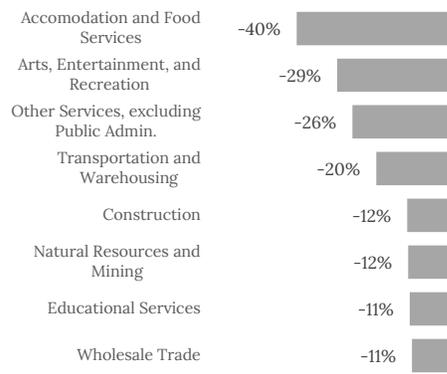


Figure 3 Percentage Job Loss by Industry, 2020, BPDA Research Division Analysis

When examining the types of jobs held by Boston residents, it is clear the city's resident labor force has undergone a significant transformation. Of the 266,505 Boston residents working in 1970, 45% held blue-collar jobs and 55% held white-collar jobs. In 2019, of the 406,937 Boston residents working, those holding blue-collar jobs fell to 29% and those employed in white-collar occupations rose to 71%. The changing needs of a service-based economy have resulted in a better-educated and more highly skilled workforce. In 2019, 89% of the adults in Boston had finished high school, compared to 53% in 1970. In 2019, 52% of adults in Boston had completed college education, compared to only 10% in 1970 and 36% in 2000.

Along with Boston's well-educated workforce comes comparatively high household incomes and wages. In 2010, median household income in the City was \$49,893, up 27% from 2000. Since 1990, median household income in Suffolk County was consistently more than 30% greater than the median household income in the United States, 59% greater in 2010. Per capita Personal Income in Suffolk County was \$82,632 in 2018, 9% increase since 2010. The average annual wage and salary disbursement per job in Suffolk County was \$102,336 in 2018. Beginning in

1990, wages in Suffolk County began to grow faster than the state and the nation. In 2018, the average annual wage per job in Suffolk County was 38% higher than the average Massachusetts wage and 76% higher than the national average wage.

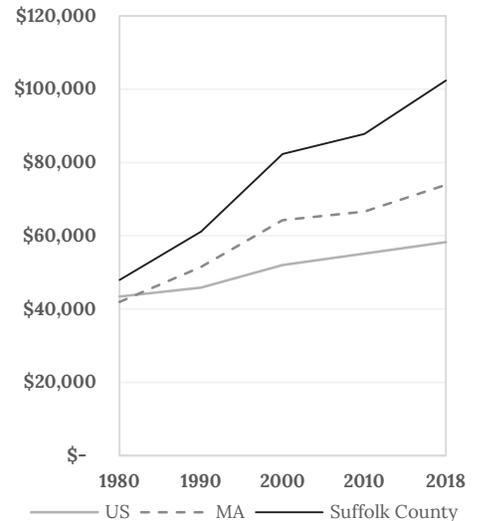


Figure 4 –Average Annual Wages in the U.S., Massachusetts and Suffolk County 1980-2010 Census, 2018 ACS Estimate

ECONOMIC ACTIVITY IN THE CITY OF BOSTON

Transportation

A key to any city's economic health is its ability to transport residents, workers, visitors, and goods efficiently and safely to their intended destinations, whether in the city or throughout the region.

Local Transportation

According to the 2010 census, 36% of households in Boston did not have a vehicle, which makes public and alternative transportation particularly important to city residents.

Boston's public transportation system reaches into every neighborhood of the city whether by trolley, subway, bus, or commuter train. The MBTA provides commuter rail, subway, local and express

bus services, and water ferry service to 175 cities and towns in eastern Massachusetts, offering public transit to a population of almost 4.8 million people in an area of 3,244 square miles. Prior to the COVID-19 pandemic, the MBTA served about 1.2 million passengers every weekday. As of November 2020, that number dropped to approximately 368,000 passengers. Figure 5 illustrates the average weekday trips by month in 2019 and 2020.

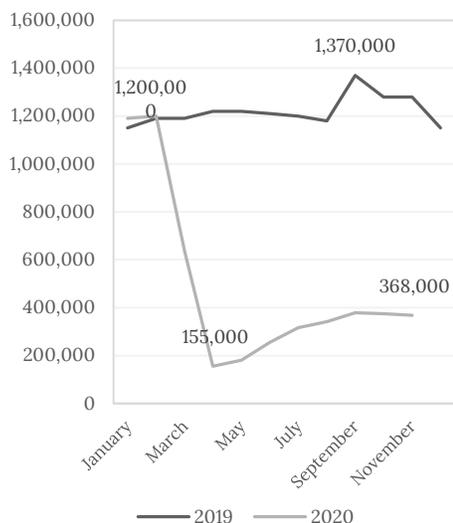


Figure 5 MBTA Average Weekday Trip by Month, 2019-2020

The Boston economy will struggle return to normal until residents and visitors feel fully comfortable taking mass transit again.

National and International Travel

Boston’s Logan International Airport is the most active airport in New England. In 2019, Logan served over 42.5 million international and domestic passengers, a 3.9% increase from 2018. In January and February 2020, the number of passengers departing and arriving in Logan airport increased by 7% compared to 2019, however starting in March, the numbers began declining rapidly due to the COVID-19 pandemic and the travel restrictions which followed. Total number of passengers in 2020 dropped to 12.6 million in 2020, a 70% decrease from 2019. Total number of flights, domestic and

international, decreased 52% between 2019 and 2020.

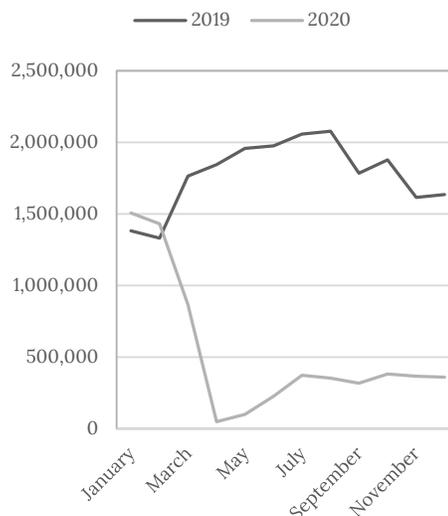


Figure 6 Air Passenger Travel at Logan Airport by Month, 2019-2020, Massport Airport Statistics

Tourism and Culture

Boston entertains many types of visitors each year: those seeking historical sites, museums, sporting events, restaurants, theatre or business conventions. According to the Greater Boston Convention and Visitors Bureau, an estimated 22.7 million people visited Boston in 2019. Of those, an estimated 2.9 million were international visitors to Greater Boston. Given the impact of COVID-19 on travel and tourism, we can expect a significant decline in the number of tourists visiting Boston in 2020 and 20201.

Prior to the pandemic, Boston was an attractive destination for conventions, meetings, and gate shows. The Boston Convention and Exhibition Center (BCEC), located on a 60-acre site in South Boston, contains 516,000 square feet of contiguous exhibition space designed to accommodate larger conventions. This facility, along with new hotel projects in the City, has given a significant boost to the local economy. In 2019, the Boston Convention and Exhibition

Center, along with the John B. Hynes Memorial Convention Center, hosted 336 events, with an aggregate of 832,243 attendees, generating 800,000 hotel room nights and \$870 million in economic impact. The COVID-19 pandemic forced the cancellation of conventions and events, and the BCEC was converted to the Boston Hope field hospital in April and May.

The Boston area is home to five major professional sports teams: The Boston Red Sox baseball team plays at historic Fenway Park, and the Boston Bruins hockey team and the Boston Celtics basketball team play at the TD Garden. The New England Patriots football and Revolution soccer teams play at Gillette Stadium in nearby Foxborough, MA.

The New England Aquarium, Museum of Fine Arts, Isabella Stewart Gardener Museum, Institute of Contemporary Art, and many other attractions bring in thousands of tourists each year. The city also provides venues for concerts, ice shows, circuses and other entertainment performances as well as street festivals and parades in its neighborhoods and parks.

Hotels

Tourism is a large Boston industry, which supported approximately 63,000 *Accommodation and Food Services* jobs in 2019, 9.3% of Boston's total payroll jobs. The hotel industry provided 11,609 direct jobs in 2018, 1.8% of Boston's total payroll jobs. These significant shares exposed the City to high rates of unemployment, due to the direct hit the industry has suffered and will continue to suffer due to COVID-19. In 2020, *Accommodation and Food Services* jobs decreased by 39.7%, losing 24,871 jobs in total.

As of January 2020, Boston had 93 hotels, with an average daily room rate of \$269 per night. According to the Pinnacle Perspective Monthly Report, the average occupancy rate of hotels in Boston was 79.8% from 2009 through 2019. The rate

dipped in 2009 with the Great Recession but soon recovered, reaching an average of 83.7% in November 2019.

Due to COVID-19 and the state's stay-at-home advisory, the occupancy rate dropped from 72.7% in February 2020 to 5.3% in April. Overall, the lodging market in Boston and Cambridge's occupancy rate dropped to less than 26% in 2020, driving revenue per available room down more than 80% percent, according to the Pinnacle Advisory Group. The projected 2021 rate will increase to 42%, still half of the 2019 rate.

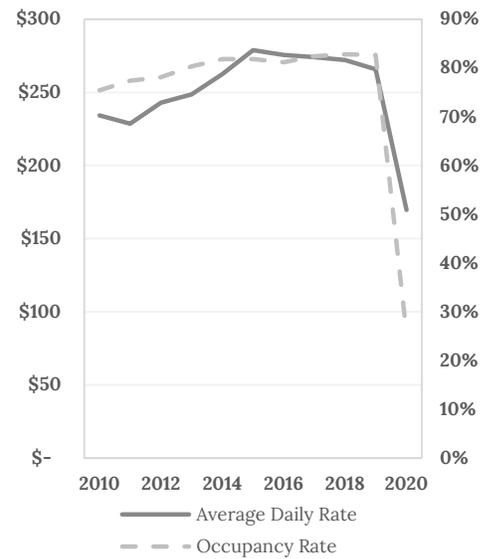


Figure 7 Boston Average Daily Rate and Room Occupancy, 2010-2020, Pinnacle Advisory Group and BPDA Research Division

The number of hotel rooms available in the City has grown over the last 10 years, increasing from about 18,000 rooms to almost 23,000 rooms. Much of this was in response to demand resulting from the construction of the Boston Convention and Exhibition Center (BCEC). The BCEC and the smaller Hynes Convention Center produce considerable demand for hotel nights.

At the end of 2019, nearly one million square feet of hotel space was under construction and 800,000 square feet was

completed in Boston, notably in the Back Bay, Downtown, Roxbury, and South Boston neighborhoods.

Consumer Spending

Overall consumer spending by Boston residents, which includes both online and in-person transactions, fell by 19% during the month of March and 41% in April as the COVID-19 shutdown began (See Figure 8). Boston residents who maintained their jobs during the pandemic still had income to spend, but may have shifted their spending patterns in light of the public health risks (for example limiting restaurant dining). However, for residents who lost their jobs or a significant portion of their income, lack of financial resources became a driving factor behind consumer spending decisions.

Between December 2020 and February 2021 total spending averaged -2% compared to January 2020. As of March 14, 2021, total spending by all consumers decreased by 1.1% compared to January 2020.

Boston spending on *groceries* has been elevated throughout the pandemic, as people eat at home more often, similar to national trends. On March 16, grocery spending peaked at 86.9% above January 2020 levels. In the months of March, September and December 2020 Grocery spending averaged 41% above January 2020 levels, reaching 48% in February 2021.

Spending in the *Accommodation & Food* category fell by 75% in April, increasing gradually over the spring as the stay-at-home advisory and other COVID related regulations were relaxed, averaging 33% less than January 2020 levels during the summer months. In February 2021, Accommodation & Food spending decreased by 36.3% compared to January 2020. Spending on *Transportation* decreased 83% in April 2020. It then increased slightly in the following months,

plateauing around 64% starting in July 2020.

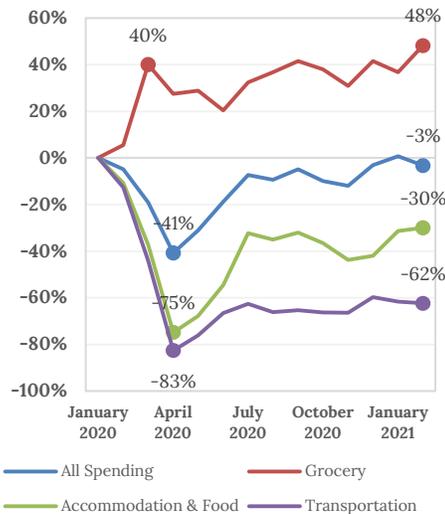


Figure 8 Percent Change in Consumer Spending, January 2020-February 2021, Opportunity Insights Economic Tracker

Reduced consumer demand due to the pandemic continues to affect Boston businesses. Small business revenue in Boston fell by 67% from January to April 2020. Since September 2020, small business revenue averaged 54% below January 2020 levels. Revenue for small businesses in the *Leisure and Hospitality* sectors fell by 86% in April and is still down 71% in February 2021. Revenue for small businesses in the *Education & Health Services* sectors fell by 79% in May and was still down 65% percent in February 2021.

REAL ESTATE

The COVID-19 pandemic has altered the pace of development in Boston as construction activity was paused in the spring and the development review activities had to be restructured and moved online out of public health considerations. Moreover, the current economic recession's length and impact are still not fully known and it is unclear how it will affect the Boston's Real Estate market.

Housing

The housing market is a source of growth for many industries and is a barometer of economic health overall. Since the end of the Great Recession, the housing market has come back unevenly across the country, with the COVID-19 pandemic creating a new set of challenges.

Despite initial setbacks during the spring and summer, the BPDA approved 15.9 million square feet of new development: 9.9 million residential square feet and 6.0 million non-residential square feet. A major contributor to the 2020 approval total is the Suffolk Downs Redevelopment which approved 7,150 new residential units in East Boston.

The 9.9 million residential square feet translate to over 10,123 new residential units, of which 2,826 are income-restricted. In comparison to earlier years, 2020 had a larger percentage of income-restricted units, at 27.9%.

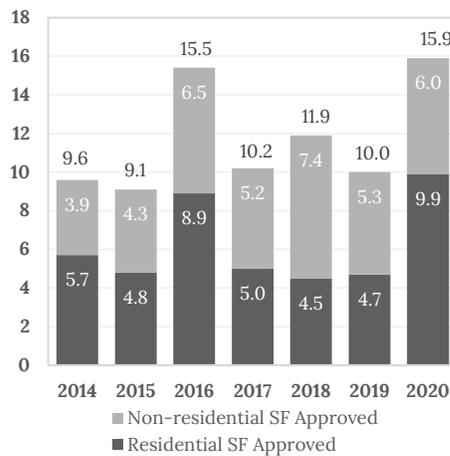


Figure 9 Total Square Feet Approved by Residential and Non-Residential, 2014-2020, in millions, BPDA Research Division

The two-month construction halt in March-April 2020 affected the permitting of new projects in 2020. The year started strong with 2.5 million square feet of housing receiving permits in January and 1.4 million square feet in February. In March,

the number of permits declined to a little over 0.5 million square feet.

Vacancy rates in residential buildings with five or more units have increased during the pandemic. For the city as a whole, multifamily residential vacancy rates increased from 5.0% in the fourth quarter of 2019 to 10.9% in the fourth quarter of 2020.

Office Market

Prior to the COVID-19 pandemic, Boston experienced job growth in industries such as professional and scientific services, finance and insurance, which require commercial office space. This employment growth drove an increase in demand for office space in Boston. During the pandemic, many office workers began working from home and it is still unclear when and to what extent these workers will return to work in office.

As of 2020, there are approximately 112 million square feet of office space in Boston. Downtown, which includes the Financial District, remains Boston's largest commercial office market with 48 million square feet of office space, followed by Back Bay with 17 million square feet and the South Boston Waterfront with 14 million square feet.

As existing leases expire and as new office developments come on line, reduced demand has led to increasing vacancy rates in the commercial office market, reaching 13% in the South Boston Waterfront and 10% in Downtown. The City's total office real estate vacancy rate reached 8.8% in 2020.

Life Science and Technology Industry

Life science and biomedical research companies' demand has shown to be resilient during the pandemic, unlike traditional office tenants. The Greater Boston lab and life science market has

continued to rank first across the nation in JLL annual report since 2012. As the lab space market in Cambridge becomes increasingly tight, Boston's life science market absorbs the spillover, as well as independently attract new companies.

According to CBRE, several construction projects in the City, previously planned as office, are now likely becoming speculative lab developments. Samuels & Associates announced they will develop the remaining 250,000 sq. ft. of Car Gurus' new headquarters building at 101 Massachusetts Ave into lab space. Current demand for lab space in Boston remains strong with 16 companies in the market for more than a combined 710,000 square feet of space downtown.